



Metal Lathe Safety

West Virginia University
Environmental Health and Safety



Pre-Use Activities

- Review and understand information provided in the metal lathe operator's manual with particular attention given to descriptions of safety procedures.
- Inspect the metal lathe for damage, disrepair, or missing parts, including assessing whether any shear pins are broken. Make sure all shields and guards are securely in place.
- If a metal lathe fails the pre-use inspection, notify your supervisor and remove the lathe from service by attaching a red tag that states "OUT OF SERVICE". Complete red tag with appropriate information.



Operating Precautions

- Wear safety glasses with side protectors when using a metal lathe.
- Never wear gloves, a tie, loose clothing, a watch, rings, or jewelry when using a metal lathe. Tie long hair back or secure under a cap.
- Determine that the work piece is properly centered and securely clamped in the chuck. Remove the chuck key from the chuck before starting the metal lathe.
- Keep metal lathe cutting tools sharp. Do not use damaged or broken metal lathe cutting tools.
- Center drill the work piece and use a live tail-stock for stability when the work piece is turning.
- Keep your hands and fingers away from metal lathe moving parts and cutting tools.
- Follow recommended specifications for speeds of rotation and feed and depth of cut for the metal being turned.
- Assure the adjustment for the cutting tool and tool rest is set slightly above the center of the work piece.
- Do not measure work or attempt to adjust a chuck or work piece while it is rotating.
- Start the metal lathe at a slow speed and then gradually increase the rotational speed.
- Never reach across the rotating chuck or work piece while performing filing or burnishing operations.
- Back the cutting tool away from the metal being turned and then turn off the metal lathe before adjusting or removing a work piece. Do not use your hand to brake or stop a rotating chuck.
- Clean the metal lathe work area. Use a brush, rather than your fingers or hands, to sweep up waste metal shavings and cuttings.
- Disconnect the power source before performing metal lathe maintenance.